

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

P3EA
Revision 24
McCAULEY
2A34C 2A37C
B2A34C B2A37C
C2A34C D2A37C
D2A34C E2A37C
E2A34C F2A34C
April 17, 2006

TYPE CERTIFICATE DATA SHEET NO. P3EA

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P3EA) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with the pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder: McCauley Propeller Systems
7751 East Pawnee
Wichita, KS 67207

Type	Constant speed; hydraulic
Engine Shaft	Special flange 4 in. B.C.
Hub Material	Aluminum Alloy
No. of Blades	Two
Hubs Eligible	2A34C22, D2A34C34, D2A34C49, 2A34C50, D2A34C58, F2A34C58, E2A34C64, 2A34C66, D2A34C67, E2A34C70, E2A34C73, D2A34C78, D2A34C98, 2A34C201, 2A34C203, C2A34C204, B2A34C205, 2A34C209, 2A34C210, 2A34C216, 2A34C221, 2A37C223, B2A34C225, 2A34C227, B2A37C228, D2A37C230, D2A37C231, 2A37C232, E2A37C233, E2A37C234, B2A37C238, 2A34C239, 2A34C240 and 2A34C241

Blades Eligible (See NOTE 2)	Maximum <u>Continuous</u> HP RPM	<u>Take-Off</u> HP RPM	Diameter Limits (See NOTE 2)	Approx. Max. Wt. Complete (For reference only) (Max. Dia.)
<u>Hub Model 2A34C22</u>				
84SF-4 to 84SF-12	220 2800	220 2800	80" - 72" (-4 to -12)	47.0 Lbs.
<u>Hub Model D2A34C34</u>				
84JF-0 to 84JF-12	285 2700	285 2700	84" - 72" (-0 to -12)	51.0 Lbs.
<u>Hub Models D2A34C49 and 2A34C50</u>				
90A-0 to 90A-18	265 2700	265 2700	90" - 72" (-0 to -18)	52.0 Lbs.

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Blades Eligible (See NOTE 2)	Maximum <u>Continuous</u> HP RPM		<u>Take-Off</u> HP RPM		Diameter Limits (See NOTE 2)	Approx. Max. Wt. Complete (For reference only) (Max. Dia.)
<u>Hub Models D2A34C58, F2A34C58, E2A34C64, 2A34C66, E2A34C70, E2A34C73, D2A34C78 and D2A34C98</u>						
90AT-0 to 90AT-12	285	2700	300	2850	90" - 78" (-0 to -12)	52.5 Lbs. * 58.5 Lbs. ** 57.0 Lbs.
* with E2A34C64 hub						
** with E2A34C70 or E2A34C73 hub						
<u>Hub Model D2A34C67</u>						
76C-0 to 76C-6	225	2800	225	2800	76" - 70" (-0 to -6)	47.0 Lbs.
<u>Hub Model 2A34C201</u>						
90D[X]-0 to 90D[X]-18	285	2800	300	2850	90" - 72" (-0 to -18)	49.0 Lbs.
<u>Hub Model 2A34C203</u>						
90DC[X]-0 to 90DC[X]-18	285	2700	300	2850	90" - 72" (-0 to -18)	49.0 Lbs.
90DC[X]-0 to 90DC[X]-18	210	2800	210	2800	80" - 72" (-0 to -18)	49.0 Lbs.
<u>Hub Model C2A34C204</u>						
90DC[X]-0 to 90DC[X]-18	285	2700	300	2850	90" - 72" (-0 to -18)	49.0 Lbs.
<u>Hub Models B2A34C205 and 2A34C227</u>						
90DH[X]-0 to 90DH[X]-18	285	2700	300	2850	90" - 72" (-0 to -18)	49.0 Lbs.
<u>Hub Models 2A34C209 and 2A34C210</u>						
78CC[X]-0 to 78CC[X]-8	225	2800	225	2800	78" - 70" (-0 to -8)	* 49.0 Lbs. ** 53.0 Lbs.
* with 2A34C209 hub						
** with 2A34C210 hub						
<u>Hub Models 2A34C216 and 2A34C221</u>						
90DH[X]-12 to 90DH[X]-20	220	2700	220	2700	78" - 70" (-12 to -20)	53.8 Lbs.
<u>Hub Model 2A37C223</u>						
90R[X]-0 to 90R[X]-12	285	2700	300	2850	90" - 78" (-0 to -12)	64.0 Lbs.

Blades Eligible (See NOTE 2)	Maximum <u>Continuous</u> HP RPM		<u>Take-Off</u> HP RPM		Diameter Limits (See NOTE 2)	Approx. Max. Wt. Complete (For reference only) (Max. Dia.)
<u>Hub Model B2A34C225</u>						
90DJ[X]-0 to 90DJ[X]-24	285	2700	300	2850	90" - 66" (-0 to -12)	49.0 Lbs.
<u>Hub Model B2A37C228</u>						
90RD[X]-0 to 90RD[X]-18	300	2700	300	2850	90" - 72" (-0 to -18)	61.0 Lbs.
<u>Hub Models D2A37C230, D2A37C231 and 2A37C232</u>						
90RE[X]-0 to 90RE[X]-12	285	2700	300	2700	90" - 78" (-0 to -12)	61.0 Lbs.
	285	2700	300	2850	86" - 78" (-4 to -12)	61.0 Lbs.
<u>Hub Models E2A37C233 and E2A37C234</u>						
90RE[X]-8 to 90RE[X]-12	285	2700	300	2850	82" - 78" (-8 to -12)	65.0 Lbs.
<u>Hub Model B2A37C238</u>						
90RE[X]-0 to 90RE[X]-18	300	2700	300	2850	90" – 72" (-0 to -18)	61.0 Lbs.
<u>Hub Model 2A34C239</u>						
90DM[X]-15 to 90DM[X]-18	285	2800	285	2800	75" – 72" (-15 to -18)	53.0 Lbs.
<u>Hub Model 2A34C240</u>						
90 DJ[X]-0 to 90DJ[X]-24	280	2500	280	2500	90" – 66" (-0 to -24)	65.0 Lbs.
<u>Hub Model 2A34C241</u>						
82PG[X]-6 to 82PG[X]-10	300	2700	300	2700	76" – 72" (-6 to -10)	65.0 Lbs.

Certification Basis

Models D2A34C49/90A, 2A34C50/90A and D2A34C58/90A:
Civil Air Regulations Part 14 effective December 15, 1956.

Models E2A34C64/90AT, 2A34C66/90AT and D2A34C67/76C:
Civil Air Regulations Part 14 effective December 15, 1965 with
Amendment 14-1 thereto.

Models E2A34C70/90AT, E2A34C73/90AT and D2A34C78/90AT:
Federal Aviation Regulations Part 35 with Amendment 35-1 thereto.

Models 2A34C22/84SF, D2A34C34/84JF, F2A34C58/90AT,
D2A34C98/90AT, 2A34C201/90DA, 2A34C203/90DCA,
C2A34C204/90DCB, 2A34C209/78CCA, and 2A34C210/78CCA:
Federal Aviation Regulations Part 35 with Amendments 35-1 and
35-2 thereto.

Model B2A34C205/90DH[X] and 2A34C216/90DH[X]:
Federal Aviation Regulations Part 35 effective February 1, 1965
with Amendments 35-1 thru 35-4 thereto.

Models 2A34C221/90DH[X] and B2A34C225/90DJ[X]:
Federal Aviation Regulations Part 35 effective October 14, 1980
with Amendments 35-1 thru 35-5 thereto.

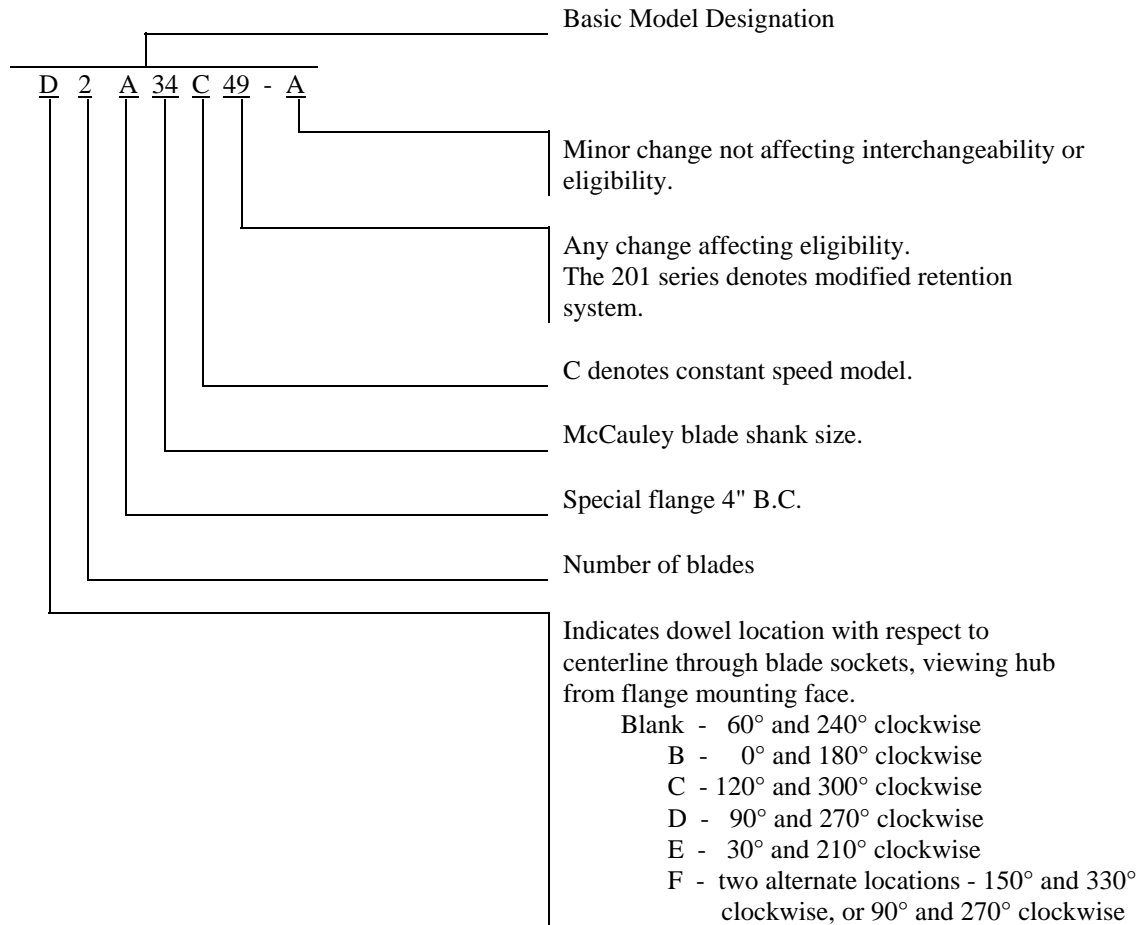
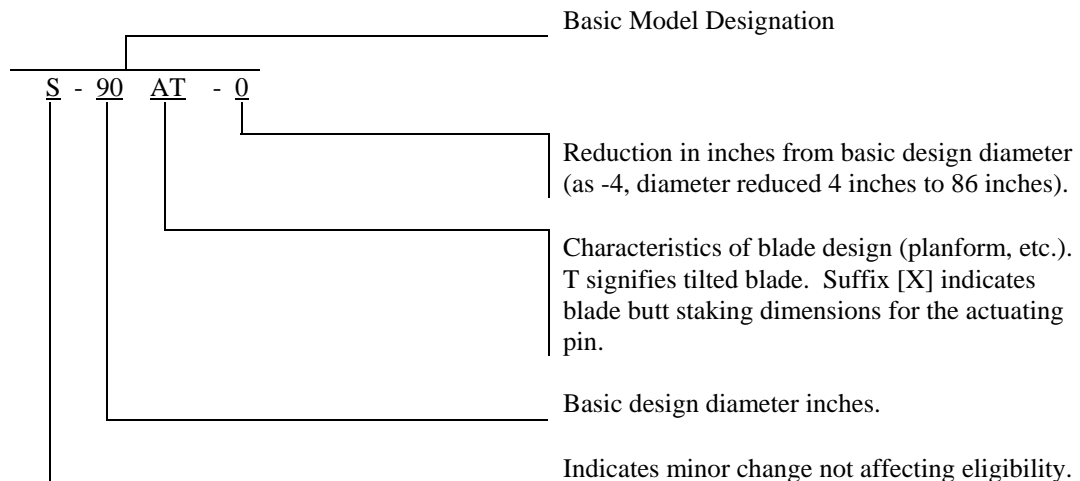
Models 2A37C223/90R[X], 2A34C227/90DH[X], B2A37C228/90RD[X],
D2A37C230/90RDB, D2A37C231/90RDC, 2A37C232/90RDB,
E2A37C233/90RDB, E2A37C234/90RDC, B2A37C238,
2A34C239/90DM[X], 2A34C240/90DJ[X] and 2A34C241/82PG[X]:
Federal Aviation Regulations Part 35 effective August 18, 1990
with Amendments 35-1 thru 35-6 thereto.

Type Certificate No. P3EA issued May 11, 1962 under Delegation Option
Authorization of Regulations of the Administrator Part 410.

Date of application for Type Certificate: March 12, 1962.

Production Certificate No. 3

Production Basis

NOTE 1. Hub Model Designation.NOTE 2. Blade Model Designation.

NOTE 3. Pitch Control.

With the following governors:

Woodward Model x,210,xxx	Wt. 3.5 lb.
Hoof Model 1,000,007 Series	Wt. 3.5 lb.
Hoof Model 1,604,014 Series	Wt. 3.5 lb.
Garwin Model 34-828 Series	Wt. 3.0 lb.
Hartzell Model F-2-7()	Wt. 4.5 lb.
McCauley Model C290D[X]/T[X]	Wt. 2.8 lb.

NOTE 4. Not applicable.

NOTE 5. Left Hand Models. The left hand version of an approved model is eligible at the same rating and diameter limitations as listed for the right hand model.

NOTE 6. Not applicable.

NOTE 7. Accessories.

a. With McCauley spinners:

- (1) D-2845 Installation for model 2A34C50.
- (2) D-2771 Installation for models D2A34C34, D2A34C49 and D2A34C58.
- (3) D-4082 Installation for model D2A34C58.
- (4) D-2271 Installation for model D2A34C67.
- (5) D-4101 Installation for model 2A34C22.
- (6) D-3290, D-3396 or D-5255 Installation for model 2A37C223.
- (7) D-5915 Installation for models B2A34C225 and 2A34C227.
- (8) D-3396 or D-5255 Installation for model B2A37C228.
- (9) Per McCauley drawing E-7543 for model B2A37C238.
- (10) Model 2A34C241 with spinner reference McCauley Drawing E-7580.

NOTE 8. Not applicable.

NOTE 9. Special Limits: Please reference the airworthiness limitation section of the appropriate Service and Operator's manuals.

Table of Propeller-Engine Combinations
Approved Vibrationwise for Use on Normal Category Single-Engine Tractor Aircraft

The maximum and minimum propeller diameters can be used from a vibration standpoint are shown below. No reduction below the minimum diameter listed is permissible since this figure includes the diameter reduction allowable for repair purposes.

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Crankshaft Damper Configuration</u>	<u>Max. Dia. (Inches)</u>	<u>Min. Dia. (Inches)</u>	<u>Placards</u>
D2A34C67	76C	Continental IO-360 Series (up to 210 hp. @2800 r.p.m.)	Two 6th order, or one 4.5 and one 6th order	76	70	None
D2A34C67	76C	Continental TSI0-360 Series (up to 210 hp. @2800 r.p.m.)	Two 6th order, or one 4.5 and one 6th order	76	74	None

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Crankshaft Damper Configuration</u>	<u>Max. Dia. (Inches)</u>	<u>Min. Dia. (Inches)</u>	<u>Placards</u>
2A34C209 or 2A34C210	78CCA	Continental IO-360 Series (up to 210 hp. @2800 r.p.m.)	Two 6th order, or one 4.5 and one 6th order	78	72	None
D2A34C34	84JF	Continental IO-470 Series (up to 260 hp. @2625 r.p.m.)	Two 6th, one 5th and one 4.5 order	84	79	None
D2A34C34	84JF	Continental TSI0-520 Series (up to 285 hp. @2700 r.p.m.)	Two 6th, one 5th and one 4th order	81	79	None
2A34C22	84SF	Franklin 6A-335 Series (up to 180 hp. @2800 r.p.m.)	Viscous Damper	80	72	None
2A34C22	84SF	Franklin 6A-350 Series (up to 220 hp. @2800 r.p.m.)	Viscous Damper	80	74	None
D2A34C49 or 2A34C50	90A	Continental 0-470 and IO-470 Series (up to 260 hp. @2625 r.p.m.)	Four 6th order	88	76	None
		Continental 0-470 and IO-470 Series (up to 230 hp. @2650 r.p.m.)	One 5th and one 6th order	88	80	None
D2A34C58 2A34C66 E2A34C64 D2A34C78 E2A34C70 E2A34C73 or D2A34C98	90AT	Continental 0-470 and IO-470 Series (up to 260 hp. @2625 r.p.m.)	Four 6th order	88	76	None
		Continental 0-470 and IO-470 Series (up to 230 hp. @2650 r.p.m.)	One 5th and one 6th order	88	80	None
2A34C66	90AT	Continental 0-470 Series (up to 190 hp. @2300 r.p.m. max. cont. and 213 hp. @2600 r.p.m. takeoff)	Four 6th order	90	80	None

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Crankshaft Damper Configuration</u>	<u>Max. Dia. (Inches)</u>	<u>Min. Dia. (Inches)</u>	<u>Placards</u>
D2A34C58 D2A34C78 F2A34C58 or D2A34C98	90AT	Continental IO-520 Series (up to 285 hp. @2700 r.p.m. maximum continuous and 300 hp. @2850 r.p.m. takeoff)	One 4th, one 5th and two 6th order	88	80	None
D2A34C58 D2A34C78 or D2A34C98	90AT	Continental TSI0-520 Series (up to 285 hp. @2600 r.p.m. max. continuous & 300 hp. @2700 r.p.m. takeoff)	One 4th, one 5th and two 6th order	81.5	80.5	None
D2A34C58 2A34C66 D2A34C78 or D2A34C98	90AT	Continental TSI0-520 Series (up to 285 hp. @2700 r.p.m.)	One 4th, one 5th and two 6th order	82	80	None
D2A34C58 2A34C66 D2A34C78 or D2A34C98	90AT	Continental TSI0-520 Series (up to 285 hp. @2700 r.p.m.)	One 4th, one 5th and two 6th order	88	86	None
E2A34C64 E2A34C70 or E2A34C73	90AT	Continental TSI0-520 Series (up to 285 hp. @2700 r.p.m.)	One 4th, one 5th and two 6th order	82	80	None
E2A34C64 E2A34C70 or E2A34C73	90AT	Continental IO-520 Series (up to 285 hp. @2700 r.p.m. maximum continuous and 300 hp. @2850 r.p.m. takeoff)	One 4th, one 5th and two 6th order	82	80	None
2A34C201	90DA	Continental 0-470 Series (up to 230 hp. @2600 r.p.m.)	One 5th and one 6th order	82	80	None

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Crankshaft Damper Configuration</u>	<u>Max. Dia. (Inches)</u>	<u>Min. Dia. (Inches)</u>	<u>Placards</u>
2A34C201	90DA	Franklin 6AS-350 Series (up to 235 hp. @2800 r.p.m. maximum continuous and 250 hp. @2800 r.p.m. takeoff)	Viscous damper	88	76	None
2A34C201	90DA	Franklin 6A-350-C Series (up to 220 hp @ 2800 rpm takeoff and maximum continuous)	Viscous Damper	88	76	None
2A34C203	90DCA	Continental IO-360 Series (up to 210 hp. @2800 r.p.m.)	One 6th and one 4.5 order	80	74	None
2A34C203	90DCA	Continental O-470 Series (up to 230 hp. @2600 r.p.m.)	One 5th and one 6th order	88	80	None
C2A34C204	90DCB	Continental O-470 Series (up to 230 hp. @2400 r.p.m.)	Two 6th, one 5th and one 4.5 order	82	80	None
C2A34C204	90DCB	Continental O-470 Series (up to 230 hp. @2400 r.p.m.)	Two 6th, one 5th and one 4.5 order	90	88.5	None

NOTE 10. Special Notes. Aircraft installation must be approved as part of the aircraft type certificate upon compliance with the applicable airworthiness requirements.

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